Appendix B

Field Logs

"Rite in the Rain®"
ALL-WEATHER WRITING PAPER

HORIZONTAL LINE

All-Weather Notebook
No. 391

YERINGTON 132039
BACKGROUND SOILS
7/25/07 –

4 5/8" x 7" - 48 Numbered Pages

Wed. July 25, 2007 Sunny / clear - Partly cloudy

PBassett + Tim Hendrickson (BC)

0800 - Arrive at Weed Heights Mine office

0830 - Conduct project kick-off and safety meeting to review project scope, planned field activities work schedule, project HASP + specific safety issues (JSA) Participants included:

- Penny Bassett (BC)
- Tim Hendrickson "
- Mike Weeks (Herbst)
- Roy Thun (ARC)
- John Batcholder "
- Jake (Copper Env.)
- Doyle "
- Don Haldon (Foxfire)

Decision was made to use a 4WD backhoe for safety. This will cause delay in start until Friday while rental backhoe acquired.

1300 - Remainder of day to organize field supplies, sample containers.

1130 Met with Wil Duncan (EPA) and Nicole ? (EPA contractor) regarding EPAs current radiation survey activities in Process Area. They want to take gamma readings in background soil locations in order to estabish rad background. Also want to drill one small borehole (direct push) + place rad probe down into subsurface soils. Want to coordinate with background soils locations.

P Bassett

Thurs July 26 2007

- Sunny, clear - partly cloudy, ~95°F

0830 P Bassett + T Hendrickson mark out utility locates for USA for all bkgr soils areas.

1230 Travel to Carson City for supplies

1300 Communicated with John Powell of Test America St. Louis Laboratory about submitting soils ~~&~~ to them for U + Th by 6020. They are able to do the analysis per project requirements. Still need to review QAPP to ensure They can comply. We will collect 3 sample containers at each sample locations to submit to the following labs:

Test America (Irvine) - Metals
STL (Richland) - Ra-226, 228
TestAmerica (St Louis) - U, Th

1800 - Return to Yerington
& P Bassett

Fri July 27, 2007

- Sunny, clear - partly cloudy ~95°F

0630 Meet at Weed Heights office for safety meeting + unload backhoe
Field Crew: P Bassett, T Hendrickson, M. Weeks, D. Nond, D. Herlocker

0720 Drive to first work location

0805 BGS-A1-07
Adjust position ~100' W of planned to stay off private property
- Photo 1 - general area + backhoe
- Photo 2 - sample loc. photo

09:00 Samples: BGS-A1-07S
0-10"
- Silty sand w/minor gravel
- organic horizon 0-7", more compact from 7-10", less organic.

BGS-A1-07D 2'-3'
- Silty sand, hard compact, w/ minor gravel, roots still visible at 3' depth

10:00 **BGS-A1-08**

Move to + setup on new location. Adjusted position ~100' west to be off private property.

Photo 3 - Sample / soil horizon photo in pit

BGS-A1-08S 2"-10" 10:30

- Organic horizon 0-8"
- Silty sand w/ minor gravel + organic roots ~~[illegible]~~, no clay
  Med-dk brown, very little moisture

BGS A1-08D 2-3' 10:30

- Sand, fine-med, poorly graded minor silt, (less than shallow) Minor gravel to 1/2"

11:10 Walk to + set up at next location Discovered small 4oz glass jar for BGS-A1-08S broken. Discarded Jar + soil + filled new jar with soil from 16oz sample jar from same location ~~[illegible]~~

11:10 **BGS-A1-11**

Dig pit at location of stake

Photo 4 - Pit wall

BGS-A1-11S 2"-10" 11:30

- Organic horizon to ~8", ~~no~~ horizon not well defined
- Sand (fine-med) w/ silt + minor gravel to 1"
- Dry, some roots

BGS-A1-11D 2'-3' 11:30

Collect duplicate 11D-1 normal
11D-2 dup

Collect all sample in one bag, mix + split to normal + dup containers

- Sand (med), poorly graded. Med gravel from 1/8" to 1", rounded to subangular
- Moderately compacted but breaks w/ impact
- Some

7/27/07

12:00 **BGS-A1-12**

Set up + dig pit

Photo 5 - In Pit wall

BGS-A1-12S 2-10" 12:15

- A horizon Organics ~0-4"
- Fine-Med Sand w/ little silt, minor gravel. Dry, roots
- * Poured some of the chip sample into shallow jar for Radium. Dumped + recollected

BGS-A1-12D 2-3' 12:15

Fine-med sand poorly sorted no silt, Gravel horizon at 2-2.5 interval w/ coarse gravel to 2", angular

13:00 Lunch break

7/27/07

14:15 **BGS-A1-09**

Photo 6 - Pit Wall

Very sandy location near foothills of mtns

BGS-A1-09S 2-10" 14:30

- EPA split sample collected by D Horlacher collected 2x volume + split to laurs + his
- Fine-med poorly graded sand w/ minor gravel to 1/2"

BGS-A1-09D 2'-3' 14:30

- EPA split
- Fine-med sand poorly graded, mod gravel to 1/2", ~10-15% gravel, <5% silt, 80% sand
- Roots visible to 3'

15:05 **BGS-A1-10**

Photo 7 - Pit wall

BGS-A1-10S 2-10" 15:15

- A horizon 0-5"
- Fine-med sand, poorly graded, uncompacted little-no gravel

BGS-A1-10D 2-3' 15 15

- Gravel lens 20-26" med-coarse
- Sand w/ mod gravel 26-36"
- Gravel lens 36"+
- Sample collected primarily from 26-36" sand interval

16:00 BGS-A1-27

Adjacent to mine fence near Tibbals waste incinerator

Photo 8

- BGS-A1-27S 2-10" 16:15
  - A horizon ~ 0-3" not well defined
  - Well graded sandy gravel w/ silt. very rocky & hard packed, reddish brown Gravel from 1/2" to 3" in silt sand matrix
  - Gravel layer from 0-2'

BGS-A1-27D 2-3' 16:15

- Sand w/ gravel. Med size mod-poorly graded sand, gravel 1/4-1"

17:00 Drop collected samples in Lab storage area. All samples stored in refridgerator

18:30 off site,

P Bassett

SAT July 28, 2007

- Sunny, clear. Possible afternoon clouds, no rain forcast. Hot ~ 95-98° F

0645 Meet at Weed Hts office for safety briefing & unload backhoe

Field crew: P Bassett, T Hendrickson, M Weeks, Jake Kockler, D. Herlocker

07:30 Mobilize to first sample location

BGS-A1-32

Photo 9 - Pit wall Photo 10 - Camera case

BGS-A1-32S 2-10" 08:00

- A soil horizon poorly defined, ~ 0-6"
- 2-10" sample interval very sandy fine-med sand, no silt, minor gravel < 10%, size < 1/2". Very loose unconsolidated

BGS-A1-32D 2-3' 08:00

- V. poorly graded ~~coarse~~ med sand w/ 15-20% gravel
- poorly cemented caliche layers, discontinuous at 2-3'

08:45 **BGS-A1-31**

Photo 11 - Pit wall Photo 12 - Caliche zone

Location ~100' downhill from cat scrape exploration pit

BGS-A1-31S 2-10" 09:00

- "A" horizon ~ 0-8" very poorly defined w/ shallow roots
- Well graded silt-sand-gravel silt (15%) sand (40%) gravel (40%)
- Rodent hole near sample & interval

BGS-A1-31D 2-3' 0900

- Duplicate collected deep interval
- Coarse gravel (80%) w/ silt + sand matrix.
- White caliche in soil matrix + coating on gravel
- Rock in gravel is rhyolite volcanic w/ qtz, feldsp xtals

09:30 Move to next location

BGS-A1-31D-1 normal

-31D-2 duplicate

09:40 **BGS-A1-30**

Photo 13 - Pit wall

Location in small dry drainage ~ 50-80' uphill from cat scrape exploration pit

BGS-A1-30S 2-10" 10:00

- "A" horizon very minimal 0-3"
- Gravel ½-3" (80%) in silty sand matrix. Rock is unalt rhyolite

BGS-A1-30D 2-3' 10:00

- Med-coarse gravel (80%) in silty sand matrix, minor caliche visible much less than location 31.

10:30 **BGS-A1-25**

Photo 14 - Pit wall

BGS-A1-25S 2-10" 10:45

- "A" horizon indistinct 0-3", area of roots
- Silty sand w/ some gravel silt (25%) fine-med sand (50%)

BGS-A1-25D 2-3' 10:45

- Med-coarse gravel in silty sand matrix gravel (85%) matrix (15%)
- gravel ½-3", Caliche coating on gravel + in matrix

11:30 **BGS-A1-24**

Photo 15 - Pit wall

Location ~ 50-80 ft downhill from cat scrape prospect pit

BGS-A1-24S 2-10" 11:45

- Stiff sand, compacted, cemented, hard
- Sand (75%) w/ fine sand/silt + minor gravel to ~12"
- Sandy loam

BGS-A1-24D 2-3' 11:45

- loose sand w/ some fines & some gravel sand (60%) silt (10%) grav 15%

12:15 Lunch break

13:00 Move to next location

BGS-A1-19

Photo 16 - Pit wall

Location 20' N of cat scrape prospect pit

BGS A1-19S 2-10" 13:30

- Well graded sand, fine + coarse sand w/ some gravel

BGS-A1-19D 2-3' 13:30

- Well graded sand + gravel to 2" in fine silty matrix
- Caliche layer at 34"

14:00 **BGS-A1-20**

Photo 17 - pit wall

Location between haul rd + mine. Soil very rocky, up to 12"+ boulders

*EPA split sample (D. Herlocker)

Soil smells musty, more organic material.

BGS-A1-20S 2-10" 14:15

- Well graded sandy gravel, full range of particle size from fine to gravel
- Mid organic rich, roots

EPA split

BGS-A1-20D 2-3' 14:15

- Well graded gravel, same as shallow but more gravel. Caliche appears at ~36"

15:00 Drop samples in lab storage refridgerators & restock supplies

16:00 Offsite

P Barnett

Sun July 29, 2007

- Sunny, clear, hot ~95-98°F

06:45 Meet at Weed Hts office for safety meeting + daily planning
Mobilize to first location
Field Team: P Bassett, T Hendrickson, M. Weeks, D Herlocker

07:30 BGS-A1-01 Relocated ~ 280' SW to stay off private property

- Several local property owners approached us this a.m. to inquire what we're doing. Mostly concerned about potential future mining activities + how it could affect their property + peace
  - Pete (?) Anderson
  - Terry Quashnick 468-1473
  - Rodney Dawsky (Mason Pass Rd) north of Quashnick

Photo 18 - pit wall
Photo 19 - glove bag

BGS-A1-01S .2-10" 08:15

use screwdriver to chisel compact soil

Duplicate sample in shallow interval
~~QA~~ 01S-1 normal
01S-2 duplicate

- Organic horizon v. poorly defined ~0-4"
- Well graded sand w/ gravel (<10%)

BGS-A1-01D mod compacted/cemented 2-3' 08:15

- Well graded sand w/ gravel (15-20%) 0.5-1" rhyolite rock

09:45 BGS-A1-03

* EPA split sample location
Photo 20 - Pit wall

BGS-A1-03S 2-10" 10:15

- Well graded sand w/ minor gravel
- Hard, Well cemented
- Reddish brown color

BGS-A1-03D 2'-3' 10:15

- Med-coarse gravel in sand matrix
- Not compacted
- Gravel (~40%) Sand (~60%)
- Gravel rock is crystal rich rhyolite w/ biotite, felds, qtz

10:50 Move to next location

10:50 BGS-A1-04

Photo 21 - Pit Wall

Location ~ 700-1000' down slope from Firing Range / Bow Range, down slope from Haul Rd. Topography pretty gentle

BGS-A1-04S 2-10" 11:15

- Hard compacted mod-well graded silty sand w/ gravel.

BGS-A1-04D 2-3' 11:15

- Mod-well graded fine-med sand w/ gravel + boulders. ~20% gravel/rock Softer, less compacted, Boulders up to 20+", rhyolite volcanics.

11:30 Lunch break

12:30 BGS-A1-16 Photo 22 - Pit Wall

Generally very sandy soil w/ gravel lenses

BGS-A1-16S 2-10" 13:00

- Loose unconsolidated sand, Moderate graded sand w/ fine-crs sand w/ minor gravel (5-10%)

BGS-A1-16D 2-3' 13:00

- Loose mod graded sand w/ gravel lenses gravel 0.5-2" (~10-15%)

13:15 BGS-A1-17 Photo 23 - Pit wall

Generally coarse gravel soil w/ silty sand matrix. ~80% gravel 0.5-4".

BGS-A1-17S 2-10" 13:30

- fine roots to 8"
- Gravel (50%) in silty sand matrix

BGS-A1-17D 2-3' 13:30

- Coarse gravel lense 28-38" w/ cobbles up to 4"+
- Med-crs gravel above that
- Caliche in matrix starting at ~20"-36"

14:00 BGS-A1-18 Photo 24 - Pit wall

Brown wk organic horizon to ~8" w/ small rootlets

Med-Crs gravel in well graded matrix not clearly defined gravel horizon but just a big jumble

Some caliche in matrix starting at 16"

BGS-A1-18S 2-10" 14:15

Well graded gravel in silty sand matrix

BGS-A1-18D 2-3' 14:15

Crs gravel to 4", rhyolite silty sand matrix

14:46 BGS-A1-23 Photo 25+26 1446
* 2 photos at this spot, same
Generally very gravelly in sand matrix
med gravel to 2"
BGS-A1-23S 2-10" 14:45
- Organic zone 0-8" w/rootlets
60% gravel 40% sand matrix
BGS-A1-23D 2-3' 14:45
- Med size gravel to 2", subrounded
60-70% gravel, silt/sand matrix,
v. well graded

15:30 Drop samples at

Mon July 30, 2007

- Sunny, clear hot, light breeze
- Field crew: PBassett, Brian Bass, T Hendrickson, M Weeks, D Herlocker

06:30 Meet at weather Hts office for safety meeting + daily planning

07:30 BGS-A1-22 Photo 27-clipboard Photo 28-pitwall
Generally gravel in sandy matrix entire 3a'. Some horizontal bedded gravel lenses starting at 2.5'
BGS-A1-22S 2-10" 08:15
- Minor rocks to ~8"
- Unsorted gravel in silty sand matrix, well sorted, gravel to 2" (40%)
BGS-A1-22D 2-3' 08:15
- Med gravel to 2" in sorted lenses, subrounded (60%), brown

09:00 BGS-A1-21 Photo #29 - pit wall
Generally, silty to medium SAND, with trace angular gravel, med. brown, dry, dense.

BGS-A1-21S
silty to fine SAND, well-graded (SW), with trace gravel to 1/2" (10%), very dense, reddish brown, dry. Plant roots 6" to 8".

BGS-A1-21D
fine to medium SAND, well-graded (SW), with trace gravel to 2" (20%), med. dense, brown, dry.

09:45 BGS-A1-15 Photo #30 - pit wall
Generally, silty to medium SAND, with trace angular gravel, brown, dry. Angular gravel layer from 16" bgs to 36" bgs. Plant roots from 0" to 36" bgs.

BGS-A1-15S
silty to fine SAND, well-graded and poorly graded silty SAND (SP), trace angular gravel to 1/2" (10%), very dense, dry, reddish brown.

BGS-A1-15D
Sand and Gravel mixture (50/50), well-graded (SW/GW), with angular gravel to 2", dense, light brown, dry.

11:00 BGS-A1-13 Photo #38
Well-graded Sand from 0" to 30" bgs, and gravel/sand mixture from 30" to 40" bgs, with angular gravel to 3". Plant roots to 30" bgs.

BGS-A1-13S
Silty fine to medium SAND, well-graded, with trace angular gravel (5%) to 1/2", dense, light brown, dry.

BGS-A1-13D
Silty to medium SAND, well-graded, with angular gravel (30%) to 3" dia, med. dense, med. brown, dry.

13:15 BGS-A1-26 Photo #32 BGS-A1-26S
Poorly-graded silty SAND (SP) with trace volcanic gravel to 2" (10%), med. dense, med. brown, dry.

BGS-A1-26D
Well-graded silty to coarse SAND (SW),

with trace volcanic gravel (10%), dense, reddish brown, dry.
→ Generally, silty to fine SAND with trace igneous rock. Plant roots to 10" bgs.

13:45 BGS-A1-28 Photo #33
Generally - sand & gravel mixture with angular gravel from 1/2" to 2 1/2" Loose to med. dense. Less gravel in top feet.

BGS-A1-28S
Silty to medium SAND, well-graded (SW), with trace coarse sand, organic content, nc gravel, reddish-brown, very dense, dry.

BGS-A1-28D
Large angular gravel and thin layers of caliche (GP) with fine to medium sand (40%), loose, dry.

14:15 BGS-A1-29 Photo #34
Generally - sand with gravel to 1" dia, igneous rock. Plant roots to 12" bgs.

BGS-A1-29S
Silty to fine SAND, well-graded (SW), with trace gravel to 1/2" (igneous), dense, reddish brown, dry.

BGS-A1-29D
Angular gravel and thin layers of caliche (GP) with fine to medium sand (40%), med-dense, dry.

15:00 BGS-A1-33 Photo #35
Generally - sand and gravel mixture with gravel to 2" dia, caliche-type rock. Plant roots to 20" bgs.

BGS-A1-33S
Silty to fine SAND, well graded (SW) with little coarse sand (15%) and trace gravel (5%) to 1" dia, loose, reddish-brown, dry.

BGS-A1-33D
Angular gravel and caliche (GP) with fine to coarse sand (30%), dense, dry, Med. brown

15:30 BGS-A1-34 Photo #36

(generally, sand + gravel mixture with caliche layers, gravel to 2" (igneous).

BGS-A1-34S

Silty to fine SAND, well-graded, with trace angular gravel, very dense, reddish-brown, dry

BGS-A1-34D

Gravel and caliche, angular, to 3", with some silty to medium sand (GP), mod-dense, med. brown, dry

31 JULY 2007 - TUE

06:30 Depart hotel. Meet at site - collect equipment from lab. Meet at Weed Hts. office. Conduct H+S tailgate meeting.

08:20 BGS-A2-40 Photo #38 - Log Book
Photo #38 - BGS-A1-40
Photo #39 - Pit wall

Generally, sand and gravel mixture, with less density (compaction) possibly due to being backfill - LIKELY

BGS-A2-40S

Silty to medium, well-graded SAND with angular gravel to 3" dia. (50%) (SW/GW), loose, light brown, dry - NOTE: Possible backfill - LIKELY

BGS-A2-40D

Fine to coarse, well-graded SAND (SW) with angular gravel 1/2" to 3" (3%), loose, Med. brown, moist-slightly.
NOTE: Possible backfill - LIKELY
* Must re-locate this - GPS off mark according to map.

09:45 BGS-A2-39 Photo #39 40

Generally sand + gravel mixture - granitic gravel, angular. Silty sand in top feet, fine to medium sand below. Plant roots to 3' bgs.

BGS-A2-39S

Poorly-graded silty SAND (SP) with angular granitic gravel (25%) to 2" dia, loose, reddish-brown, dry.

BGS-A2-39D BB

Angular ~~granitic~~ GRAVEL and igneous rock/gravel and fine to medium well-sorted SAND (GP/SW) (50/50%), gravel to 4" dia, loose, med brown, dry.

10:20 Sample location for BGS-A2-40 was incorrect - GPS unit positioned it far off the desired map location by approx ½ mile. Re-mapped the location with new GPS mark that over-wrote the old one *

10:45 BGS-A2-40 - Relocated Photo #41
Generally - Sand and gravel mixture, angular gravel to 3" dia, Plant roots to 36".
BGS-A2-40S
Poorly-graded silty SAND with angular gravel (10%) to 2" dia (SP), loose, reddish-brown, dry.
BGS-A2-40D
Well-graded silty to medium SAND with angular gravel to 2" dia (30%) (SW), loose, red brown, dry.

* NOTE: Re-marked this at GPS-overwrite old mark.

11:45 BGS-A2-38 Photo #42
Generally - Sand from 0" to 12" bgs and sand/gravel from 12" to 40" bgs Plant roots to 36" bgs.
BGS-A2-38S
Poorly-graded silty SAND with trace angular gravel (5%) to ½", loose, dark brown, dry. (SP)
BGS-A2-38D
Well-graded silty to medium SAND with angular gravel (35%) to 3" dia (SW), loose, red. brown, dry.

12:45 Doyle from

13:30 BGS-A2-36 Photo #43
Generally - Sand and large angular gravel mixture with plant roots to 36"
BGS-A2-36S
Angular gravel from ½" to 6" with poorly-graded sand-silty (GP/SP) (5%/50%), loose, red brown - dark brown, dry
BGS-A2-36D
Well-graded silty to coarse SAND, with angular pebbles and gravel (20%) from ¼" to 2" (SW), loose, red brown, dry.

14:15 BGS-A1-35 Photo #44
Generally - sand and gravel mixture with 4" organic topsoil in pockets

Plant roots to 5" bgs.

BGS-A1-35S

Poorly-graded silty sand and sandy silt (SP) with trace gravel angular (5%), loose, dark brown, dry.

BGS-A1-35D

well-graded silty to coarse SAND with angular pebbles and gravel from 1/4" to 4" dia., loose, med brown + dark brown, dry.

1 AUG 2007 - Wed

06:15 Depart hotel for site.

06:30 Meet at Weed Hts. office. Brian B., Tim H., Doug/Tetra Tech, Doyle/Copper Env., Mike/Bedrock. Conduct H&S meeting & complete H&S paperwork. Mike has new fuel filter installed (offsite) this morning.

08:10 Arrive at first sample location

08:30 BGS-A2-64 Photo #45

Generally - sand & gravel mixture

from 0" to 2' bgs with angular gravel; hard caliche layer from 2' to 3' bgs, large angular gravel from 3' to 3.5' bgs. Plant roots to 12" bgs.

BGS-A2-64S

Silty to fine SAND with angular gravel 1" to 3" dia. (20%) (SP), dense, med. brown, dry.

BGS-A2-64D

Angular GRAVEL 1" to 5" dia with well-graded fine to coarse SAND (50/50%) (GP/SW), loose, med brown, dry. (Doug Herlocker - EPA samples)

09:30 BGS-A2-63 Photo #46

Generally - sand with some gravel from 0" to 2', sand w light caliche from 2' to 3', and soft sand from 3' to 3.5'. Plant roots to 20" bgs.

BGS-A2-63S

Poorly-graded Silty SAND with trace gravel-(5%) angular to 3/4" (SP), med dense, med brown, dry.

BGS-A2-63D

Poorly graded Silty SAND with trace

angular gravel (10%) 1/2" to 4" dia, (SP), loose, red brown, dry.

10:30 BGS-A2-62 Photo #48

Generally - sand & gravel mixture from 10" to 3' bgs, with increasing gravel at depth. Plant roots to 2.5' bgs.

BGS-A2-62S

Poorly-graded silty ~~SAND~~ sand with trace angular gravel to 1/2" (5%) (SP); med dense, med brown, dry

BGS-A2-62D

Well-graded fine to coarse ~~SAND~~ sand (30%) with pebbles and angular gravel (70%) from 1/2" to 1". (GW), loose, brown, dry (Doug Herlocker - ESA samples)

11:15 BGS-A2-61 Photo #48 BGS-A2-61S

Poorly-graded silty SAND with trace angular gravel (10%) from 1/2" to 1" (SP), loose, light brown, dry.

Generally - Sand & gravel mixture with increasing angular gravel at depth. Plant roots to 30" bgs.

BGS-A2-61D angular

Well-graded GRAVEL from 1/2" to 1.5" with pebbles and some fine sand (10%) loose, gray/white/black-gray rock, dry.

12:00 BGS-A2-52 Photo # 48 (Doug Herlocker - ESA samples)

Generally - well-graded sand top to bottom, with trace small gravel. Plant roots to 10".

BGS-A2-52S

Well-graded silty to coarse SAND (SW) with trace angular pebbles, loose, red brown, dry

BGS-A2-52D

Same as 52S.

13:45 BGS-A2-42 Photo # ~~49~~ 50

Generally - Sand with little gravel from 0" to 2' bgs, and gravel with some sand from 2' to 3.5'. Plant roots to 2.5' bgs.

BGS-A2-42S

Well-graded silty to coarse SAND with trace angular gravel (5%) to 1/2" dia. (SW)

loose, med brown, dry.

BGS-A2-42D

Well-graded silty to coarse sand (30%) and well-graded GRAVEL from 1/2" to 2", angular, with pebbles. (GW), loose, med brown, dry

NOTE: Pockets & layers of red brown (iron) sand & gravel.

14:45 BGS-A2-41 Photo #54

Generally - sand and gravel mixture with increasing gravel at depth and GRAVEL layer at 3' bgs. plant roots to 2.5'

BGS-A2-41S

Silty SAND, poorly-graded with trace angular gravel (5%) to 1/2" dia., loose, light brown, dry.

BGS-A2-41D

Angular GRAVEL, well-graded from 1/2" to 2", with pebbles and well-graded fine to medium sand (40%) (GW), loose, med brown, dry.

15:30 BGS-A2-43 Photo #55

Generally - silty sand and silt from

0" to 8" bgs, sand & gravel mixture from 8" to 1.5' bgs, and mostly gravel with some sand from 1.5' to 3.5 bgs. Plant roots to 3' bgs.

BGS-A2-43S

Silty SAND, poorly-graded with trace gravel (5%) angular to 1/2" dia (SP), med dense, dark brown (organic material?), dry.

BGS-A2-43D

Angular GRAVEL, well-graded from 1/2" to 2" with pebbles and some ~~well~~ fine to medium sand (20%) (GW), med dense, med brown, dry.

16:00 Completed BGS-A2-43 - last sample location for the day.

16:15 Back at Allied Hts office. Unload truck. Transport samples to Airmetco lab and into refrig.

17:00 Depart mine site.

17:15 Arrive at hotel. Complete paperwork and COC's check. Unload truck → 18:00

2 AUG 2007 - Thu

06:15 Depart hotel

06:30 Meet at Weed Hts office - H+S meeting with Mike Weeks, Dave/Copper Env, Brian/BC, Tim H./BC. Load truck with equipment and supplies.

08:00 Begin first sample location.

BGS-A1-37 Photo #53 - log book

* NOTE: This sample location was in a steep slope and was re-located in the field. We moved it ~150' south and re-GPS'd it as BGS-37, over-writing previous mark.

- Photo #54 - pit wall.

Generally - sand + gravel mixture with silt near top 6" - 10" bgs and increasing sand at depth. Color darker from 2' - 3' bgs with organic matter. Plant roots to 2.5' bgs.

BGS-A1-37S

Well-graded silty to coarse SAND and well-graded porous, volcanic gravel from 1/2" to 1" with pebbles (SW/GW), loose, dark brown, dry.

BGS-A1-37D

well-graded fine to coarse SAND and pebbles with some angular gravel (25%) (SW), dense, various color sand & pebbles, gray and white rock, dry.

NOTE: All soil and rock here is reddish/reddish-brown because of iron.

10:30 BGS-A2-44 Photo #55

Generally - silty sand and silt from 0' to 1' bgs and sand and gravel mixture from 2' to 3' bgs. Plant roots 2'.

BGS-A2-44S

Silty, poorly-graded SAND with trace angular gravel (5%) to 1/2" dia (SP), med. dense, med. brown, dry.

BGS-A2-44D

Well-graded silty to coarse SAND with pebbles and some angular gravel (20%) from 1/2" to 2" dia, loose, multi-colored, dry.

11:15 BGS-A2-45 Photo #56

* NOTE: at 11:10, Mike dug back (large) wheels into soft ground, and was forced to back

down a small hill and go down a gulch to get out. No danger of turning over. Need to watch out for potential "soft" areas on inclines. Stay on flat terrain and avoid inclines on hills.

BGS-A2-45

Generally - sand throughout profile, with small pockets of caliche and some gravel. Plant roots to 3' bgs.

BGS-A2-45S

Poorly-graded silty SAND with trace angular gravel (10%), med. dense, reddish-brown, dry.

BGS-A2-45D

Poorly-graded silty SAND with angular gravel (40%) and some coarse sand (10%) (SP/GP), loose, reddish-brown, dry.

12:30 BGS-A2-46 Photo #50

Generally - relatively homogeneous silty fine SAND top to bottom, with no gravel and decreasing density with depth. Caliche layer starting at

3' bgs - solid and very dense. Plant roots to 3' bgs

BGS-A2-46S

Silty SAND - poorly-graded (SP), dense, med. brown, dry.

BGS-A2-46D

Silty SAND - poorly-graded (SP), loose, med. brown, dry.

NOTE: The absence of any pebbles or gravel suggest this is all wind-blown dust (dune).

BGS-A2-47 Photo # 58

13:15 Generally - relatively homogeneous silty SAND top to bottom, with no gravel or pebbles. Med. dense throughout. Plant roots to 3' bgs.

BGS-A2-47S

Silty fine SAND - poorly-graded (SP), med. dense, med. brown, dry.

BGS-A2-47D

Same as above at 47S.

13:45 Arrive back at Needs Mt. office. Mike Load back hoe on trailer. Unload equipment from truck into office. Throw away trash.

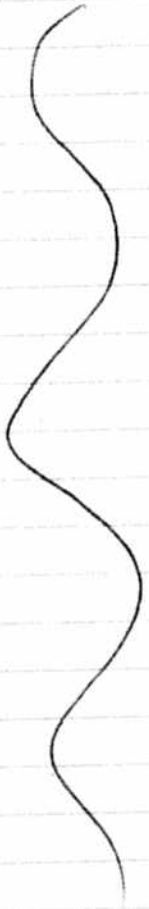
14:10 Depart Weed Hts office for lab. Sort samples into correct coolers for specific labs. Store equipment in lab.

14:50 Depart mine site

8/2/07

14:10 Depart Weed Hts office for lab. Sort samples into correct coolers for specific labs. Store equipment in lab.

14:50 Depart mine site



Brian Bass

Tues Aug 14, 2007

06:30 Meet at Weed Heights office for safety meeting + daily planning.

Field Team: Penny Bassett
Tim Hendrickson
Doyle Noud
Mike Weeks

07:30 BGS-A2-59

New Photo disk
Photo 1 - name tag
Photo 2 - pit wall

Location ~30' from drainage channel with several prospect pits + small mine dumps ~400-600' upstream. Soil very dry + gravelly w/ some large rocks up to 24". Bedrock outcrop on opposite side of channel ~50' to the south.

BGS-A2-59S (08:00)

Poorly graded gravel in silty sand matrix. Gravel is angular 1/4 - 3" intrusive granodiorite rock, Some roots

BGS-A2-59D (08:00)

Same. Poorly graded gravel in silty sand. Coarse gravel to 3".

08:10 BGS-A2-58 Photo 3 - Tag
Photo 4 - p.t wall

Dense compacted soil to 24", Caliche at 24-30", loose sandy soil 24-36"
Location near top of alluvial fan hill (not in drainage)

BGS-A2-58S (08:30)
Dense compacted silty sandy soil, mod graded. Some moisture holding soil together. Reddish brown

BGS-A2-58D (08:30)
Loose sandy soil, same composition as shallow sample but not cemented. Caliche layer visible at 24-30". White caliche replacement of roots. Little to no gravel.

09:15 BGS-A2-57 Photo 5 - Tag
Photo 6 - p.t wall
Sandy soil w/ small gravel to 1/4" Soft & loose near surface, well cemented, strong caliche zone at 24-36"

BGS-A2-57S 09:15
Well graded sand and gravel (< 1/4") uncemented, loose, med brown

BGS-A2-57D
Well cemented caliche zone in well graded sand & gravel (< 1") Gravel is intrusive qtz rich granite/granodiorite

10:15 BGS-A2-60 Photo 7 - P.t wall
Loose sandy gravel, no distinct caliche layer, not ~~very~~ cemented/compacted

BGS-A2-60S - Loose sandy gravel (< 1") well graded, med brown, numerous roots. Soil very dry.

BGS-A2-60D - Same as above. Larger gravel up to 3-4", some calcium coating on rocks but no distinct caliche zone visible at 3' depth.

10:45 BGS-A2-56 Photo 8 - P.t wall
Sandy gravel with large pieces of decomposing granite. 0-12" is well graded sand w/ little-no gravel, well cemented, mod hard. >12" is gravel in sand matrix, gravel generally 1/4-1/2" w/ some large pieces to 3-4".
Weak caliche zone @ 24-36"
BGS-A2-56S - Well graded sand, cemented/compacted mod hard. Little-no gravel. Brwn - reddish brwn.
BGS-A2-56D - Gravel (1/4"-3") in silty sand caliche matrix. Loose. Large pieces of decomposing granite

11:45 BGS-A2-49 Photo 9 - p.t wall
Loose sandy gravel, well graded, narrow caliche zone (6") at 24-30"
BGS-A2-49S - Loose sandy gravel w/ gravel 1/4-1/2", well graded, med brwn.
BGS-A2-49D - Loose sandy gravel with some caliche at 24-30", coarser gravel up to 3".

12:30 BGS-A2-50 Photo 10
Loose sandy gravel with several large granite boulders (+18") which are weathered and decomposing. (the backhoe cut it in half). Some caliche at ~18-36" not in distinct horizontal horizon but appears focused around granite boulders.
BGS-A2-50S - Loose sandy gravel well graded w/ gravel 1/4-1/2" of granite. Med brwn.
BGS-A2-50D - Loose sandy gravel w/ gravel up to 3" & crystals of qtz & felds from decomposed granite. Did not sample granite boulder that shows in photo, collected from area that had more organic soil.

13:00 Lunch Break

14:00 BGS-A2-48 Photo 11 - Label
Photo 12 - P.t wall
Well graded sandy gravel (~1/4-1/2") decomposed granite. Very dry & dusty

BGS-A2-48S - Well graded sandy gravel, decomposed granite, ~~no~~

BGS-A2-48D - Same, generally small gravel (1/4 - 1/2") but some larger pieces to 2-3". No significant caliche.

15:00 BGS-A2-51 Photo 13

Coarse gravel, loose. Gravel 1-4", not much sand or other fines. Caliche zone at 10-16" + some caliche in matrix to 36". Gravel is primarily granodiorite + granite.

BGS-A2-51S 2-10"

Coarse gravel in some sand, gravel to 4", med brwn w/ some calcite coating on rocks. Loose.

BGS-A2-51D

Duplicate = 51D-2

Normal = 51D-1

Coarse gravel w/ some silty sand in matrix gravel ~80%. Calcite coating on rocks

BGS-A2-51E

Equipment blank collected by pouring lab supplied e-pure water over rock pick used to chip sample from pit wall. Pick was wiped w/ towel as typical between samples Sharp point of pick has very little contact with soil.

16:30 Drop samples at Lab in refridgerators + restock supplies

17:00 offsite

P Barnett

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8/15/07 - 8/17/07

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Wednesday Aug 15, 2007

0630 Meet at Weed Heights office for safety meeting + project planning.
Field Team: Penny Bassett
Tim Hendrickson
Mike Weeks
Doyle Noud

0700 Mobilize to sample locations on north end of mine site. Drive thru mine site + enter fenced area NE of site (W of Evap ponds).

0730 BGS-A1-14 Photo 14 +15
Location is far down on alluvial fan, less gravel, more silt+sand. Soil is generally pretty loose, uncemented. Distinct caliche zone at 24-30" Small gravel lenses at 12-18" and 36-?"
BGS-A1-14S - Well graded silty sand w/ little-no gravel. Weakly cemented mod. firm. Reddish/yellowish brwn

BGS-A1-14D - Well graded silty sand with minor gravel in small lenses. 6" of caliche at 24-30" Mod. firm but not too hard, reddish brwn.

0830 BGS-A1-05 Photo 16+17
Location far down on alluvial fan, next to identified archeology site. Repositioned sample location ~ 150' east to remain outside marked arch. boundary. Soil is very sandy, minor gravel, loose. 0-6" loose dry, surface soil w/organics. 6-18" wk-mod cemented, mod firm silty sand. 18-36" loose mod-poorly graded sand w/ minor gravel
BGS-A1-05S - Mod graded silty sand mod. firm/cemented, no caliche Redish brwn soil.
BGS-A1-05D - Mod-poorly graded sand w/ fine-coarse sand, minor gravel (<10%) up to 1/2". Very loose, reddish brwn. No Caliche.

09:45 BGS-A1-02 Photo 18+19
Coarse gravel soil in silty sand matrix. Calcite coating on gravel but not a distinct caliche layer in matrix.
BGS-A1-02S – "A" horizon, silty sand with some gravel to 8", coarse gravel starts at 8"
BGS-A1-02D – Coarse gravel 1-5" subrounded (80% gravel) in silty sand matrix, calcite coating on gravel surface

10:45 BGS-A1-06 Photo 20+21
Mod-poorly graded fine-med sand well cemented from 4-24" with caliche filling in root casts. Some gravel lenses at 20-30" in localized areas of excavation, but not continuous horizon.
BGS-A1-06S – Caliche zone at 4-24" mod-well cemented, firm. Sand w/ minor gravel.
BGS-A1-06D – Mod-poorly graded sand w/ minor gravel, not much caliche at this depth, mod firm, reddish brown. Gravel pieces are crystalline volcanic (rhyolite?).

11:30 Lunch Break

12:30 BGS-A2-53 Photo 22+23+24
caliche zone
Very rocky, with a lot of caliche at 2-3' depth in areas of excavation. Location is close to rocky hill + bedrock is probably not very deep here. Rock/gravel is dark volcanic material.
BGS-A2-53S – V. well graded silt-sand-gravel. Loose, some caliche, med brwn.
BGS-A2-53D – Coarse gravel, rocky starting at ~20" w/ abundant caliche filling matrix around rocks. >80% rocks + decomposed sandy rock.

13:15 BGS-A2-54 Photo 25, 26
Rocky, coarse gravel with intrusive + volcanic rocks. Loose, V. well graded sandy gravel, med brwn. Some caliche at 36-38".
BGS-A2-54S – Well graded sandy gravel w/ gravel to 2".

BGS-A2-54D - Well graded coarse gravel to 4" in sandy matrix. Minor caliche near bottom of interval. Gravel consits of intrusive + volcanic rocks.

13:45 BGS-A2-55 Photo 27

VERY Rocky - not really any true soil to sample but there is some fine material + caliche along fractures and root zones. The area is basically decomposing/weathered bedrock of metamorphic origin. Grey fine grained rock of probable volcanic/intrusive origin but grain structure is altered.

BGS-A2 55S - Weathered bedrock with some caliche and organics in root zone. ~95% rock. Sample tried to minimize collection of large rocks + collected caliche areas

BGS-A2-55D - Less weathering, & fractured rock with some caliche zones. Sample collected from caliche areas.

14:45 BGS-A2-65 Photo 28

Location ~75-100 ft downhill from water tanks. Area is disturbed and surface vegetation has been cleared but excavation revealed native soil with "A" horizon + organic roots showing to ~10-12" + coarse gravel underneath. Collected sample, even though surface was disturbed.

BGS-A2-65S - Sandy gravel, mod-well graded, organics, reddish-brown soil color. gravel to 3" of intrusive granite/granodiorite

BGS-A2-65D - Coarse gravel (80-90% up to 4-6", slightly rounded, granite. Silty sand matrix. Some calcite coating on rocks but no distinct caliche zone.

15:30 Drop samples in fridge at lab. Done for the day.

P Barrett

Thurs. Aug 16, 2007

Weather Sunny + clear

06:30 Meet at Weed Heights office for safety meeting

Field Team – P. Bassett
T. Hendrickson
M. Weeks
D. Noud

Mobilize to first location

0715 BGS-A2-66 Photo 29

Location - relocate ~50-100' north to avoid area disturbed by gravel pit. Coarse gravel up to 4-6" subrounded. No distinct caliche horizon but there is some calcite coating on gravel.

BGS-A2-66S - 'A' horizon ~0-10" of silty sand + gravel w/ minor roots + organics. Wk - mod cemented Med-darker brwn.

BGS-A2-66D

66D-1 Normal
66D-2 Duplicate

Coarse gravel in silty sand matrix w/ Caliche in matrix + coating on rocks. Gravel 4-6" 80%

0800 BGS-A2-67 Photo 30 (no tag)

Coarse gravel 70-80% up to 4" Caliche in matrix from ~16-36"

BGS-A2-67S - Well graded silt-sand-gravel. "A" horizon to ~8"

BGS-A2-67D - Coarse gravel 1/2-4" pieces of granite/granodiorite in caliche sandy matrix

BGS-A2-67F - Field blank Poured ~~na~~ lab reagent grade water into 500 ml HNO_3 preserved bottles. Done in excavation pit after sample was collected.

08:45 BGS-A2-68 Photo 31

V. loose + soft V. well graded silty sand + gravel w/ granite/granodiorite rocks w/ caliche coating.

0-10" A horizon w/ less gravel, still well graded, smaller gravel to 1/2".

BGS-A2-68S - Silty sand w/ small gravel (~30%) to 1/2".

BGS-A2-68D - Med-Crs gravel (~60%) to 3-4" sub angular, granodiorite in silty sand matrix. Very soft + loose, Caliche coating but not much in matrix.

09:30 BGS-A2-69 Photo 32
Loose mod graded sand with minor gravel to 1/4-1/2". Gravel lens w/ small gravel <1" at 33". Different looking than other nearby samples becaus no coarse gravel. Location in bottom of shallow, wide drainage.
BGS-A2-69S - Mod graded silty sand w/ fine-crs sand, little-no gravel. V. loose, uncemented. No caliche.
BGS-A2-69D - Mod graded sand with some gravel (20-30%) to 1/2". Minor caliche in matrix + on rocks but no distinct caliche horizon.

10:15 BGS-A2-71 Photo 33
Loose sandy gravel. Relocate pit ~150' west to remain on BLM land, west side of fence line.
BGS-A2-71S - Silty sand, "A" horizon ~0-10", little-no gravel. Mod graded sand fine-crs.
BGS-A2-71D - V. well graded silty sand w/ gravel (~30%). Loose, uncemented. Minor caliche on gravel, small caliche horizon visible starting at 36".

10:45 BGS-A2-70 Photo 34
(*) Excavate pit at location marked by stake but the pit was solid bedrock, not enough soil for a sample. Backfilled + relocated to nearby area off of hill and it was also very rocky + unsampleable. Backfilled + relocated to area further up hill ~150' ~~fee~~ West of original stake
11:15 collect sample from this location
0-8" 'A' horizon-silty sand w/minor gravel 1/4-1/2"
8-26" - Mod cemented silty sand with gravel + some decomposing boulders
26" - narrow 1/2" band of v. dark Fe stained band in soil + rock, not sure of origin
26"-36" Strong caliche zone w/ abundant calcium in matrix + on rock. Gravel + decomposing bedrock, not transported far from source

BGS-AZ-70S - Silty sand with some gravel. Orangish brwn.
BGS-AZ-70D - Gravel + decomposing bedrock (70%) in strong caliche matrix. Fe band crosses middle of sample zone.

12:15 **BGS-AZ-72** Photo 35
"A Horizon from 0-14" - Silty sandy gravel w/ horizontal zoning + numerous roots + organics
>14" Coarse gravel + decomposing granite + rock, &
30-36" - Strong caliche zone
BGS-AZ-72S - silty sand w/ gravel rich organic, dk brwn - red brwn, weakly cemented
BGS-AZ-72D - Coarse gravel 80% up to 5", decomposing granite some strg caliche in bottom at 30"

13:30 **BGS-AZ-73** Photo 36
0-14" 'A' horizon - organic rich silty sand med-dk brwn
>14" Coarse gravel with some caliche coating but not significant in matrix
BGS-AZ-73S - A horizon, silty sand, mod graded, weakly cemented, some white caliche along roots
BGS-AZ-73D - Coarse gravel (~75-80%) up to 4"; granite/diorite.

14:00 **BGS-AZ-74** Photo 37
0-8" 'A' horizon
>8" Coarse gravel w large boulders to 12"+ including decomposing granite + granodiorite
BGS-AZ-74S - A horizon. Mod graded sand w/ some gravel to 2". Mod cemented, reddish brwn
BGS-AZ-74D - Coarse gravel + cobbles w/ sandy matrix, caliche in matrix.

8/16/07

15:00 Drop samples at lab, clean up + store supplies

Collect equipment blank sample by pouring lab grade water over rock pick.

PB ~~15:30 Off site~~

BGS-A2-74E - Equipment Blank

15:30 Off Site

PBassett

FRIDAY AUG 17, 2007

08:30 Meet w/ Mike Weeks, outline him on 3 areas where dirt prep work is required to provide access for Sonic core drill rig, including:

B/W-25
B/W-16
B/W-24

Mike will remove brush to clear a working area, + smooth uneven surfaces. Should be only 2-3 hours of back hoe work.

Mike will return rental 4WD backhoe this afternoon.

10:00 P Bassett + T Hendrickson pack up all soil samples in coolers from Lab refridgerators for transport to Carson City + shipment to labs.

11:30 Off site